

WikiGuard

Policy management for MediaWiki

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Wikibase Solutions

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- The problem
- Requirements
- The solution
- Policies
- Demo
- Questions

- Most corporate environments want flexible access control;
- MediaWiki offers basic access control (group-rights);
- Existing extensions are limited:
 - Only work based on user groups, or;
 - Can only be configured through PHP, or;
 - Can only block entire namespaces, or;
 - Do not offer the flexibility some wikis require.

To make MediaWiki a viable alternative to other content management systems, we need an extension that:

- Works for arbitrary sets of users;
- Can be configured through (special) pages on the wiki;
- Can be applied to arbitrary sets of pages (for the most part);
- Can easily be extended by administrators who require more.

WikiGuard implements these requirements with **permission policies**.

A permission *policy* is an ordered set of *rules*, that can be applied to *actions* on *objects*.

- Policy: Determines if a user should be able to execute an action;
- Rule: If-then(-else) that changes the outcome of a policy;
 - For example:
 - *If **administrator** then **allow**.*
 - *If **the moon is full** then **deny** else **allow**.*
- Action: Actions as defined by MediaWiki (view, edit, delete, ...);
- Object: A scope.
 - An object is either the *entire wiki*, a *namespace* or a *specific page*. Arbitrary scopes are not (yet) supported.

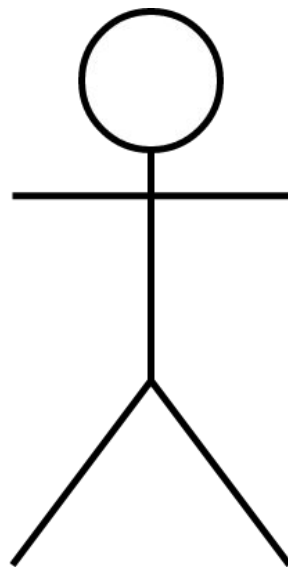
- A rule is an if-then(-else) block.
 - If the antecedent evaluates to true, then the result of the policy will be set to the consequent.
 - If the antecedent evaluates to false, and the alternative is not empty, then the result of the policy will be set to the alternative.
- Rules are processed in order (top-to-bottom).
- A matching rule changes the outcome of the policy.
- A matching rule overrides any previous outcome.

Example: Bob wants to edit the Main Page of acme.wiki.

- Bob registered three months ago.
- Bob made 300 edits.
- Bob is an administrator (sysop).

The following policy is applied to the Main Page's *edit* action:

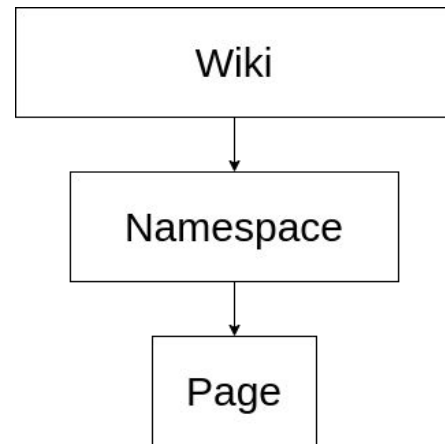
- If **made more than 1000 edits** then **allow** else **deny**.
- If **registered over six months ago** then **allow**.
- If **administrator** then **allow**.



Bob

Can Bob perform the edit? **Yes!**

- An object inherits the policies of its parent object.
- Policies are evaluated top-to-bottom.



- MediaWiki is not (yet) ready for fine-grained view blocking.
- For now, blocking views with WikiGuard should be seen as “nothing to see, move along” (context control).



Live demo

Questions